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PATENT  
Attorney Docket No. TAG-001

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

APPLICANT(S): Richard Fletcher  
SERIAL NO.: 10/012,218 GROUP NO.: 2863  
FILING DATE: December 6, 2001 EXAMINER: Aditya S. Bhat  
TITLE: IMPROVED METHODS AND DEVICES FOR IDENTIFYING,  
SENSING, AND TRACKING OBJECTS OVER A SURFACE

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

**RESPONSE TO OFFICE ACTION**

Sir:

In the Office Action mailed on November 18, 2003, the Examiner rejected claims 1-13, 16-38, 41-52 and 56-63 under 35 U.S.C. §103(a) as obvious over Rodgers et al. The Examiner's indication of allowable subject matter in claims 14, 15, 39, 40, and 53-55 is noted with appreciation. For the reasons that follow, however, we respectfully submit that the present claims are patentably distinct over Rodgers et al.

The Rodgers et al. patent discloses an object-identification system having a monitor and transceivers that successively transmit over two distinct frequencies in order to overcome "problems ... including variation in the orientation of each object antenna and coupling effects[.]" Col. 7, lines 38-40. These coupling effects can include "altering the resonant frequency of the resonant circuit." Col. 2, lines 32-33. The patentees explain that by means of successive transmission over different

frequencies, “Communication is maintained in spite of the variation in the resonant frequency of the resonant circuit which may arise from coupling ... or from variation in manufacturing environment (e.g., temperature, humidity, relative movement, or component aging).” Col. 2, lines 38-43.

Yet variation in resonant frequency — the problem overcome by Rodgers et al. — is precisely the means by which the present invention probes an object. In particular, claim 1 calls for “measuring changes in the characteristic frequencies that are caused by ... coupling.” Similarly, claim 31 requires a “device measuring changes in the characteristic frequencies that are caused by ... coupling.” In other words, the variations that Rodgers et al. seek to *eliminate* are the very ones that are *measured* in accordance with the present claims. As the applicant explains at page 5, lines 16-20 of the specification:

The objects ... couple electromagnetically to the array of electrodes and coils, which then alters the characteristic frequency of one or more elements in the array. The resulting frequency shifts are thus an indirect measure of the electromagnetic response of the object.

With regard to the Examiner’s contention that measurement is shown with reference to item 124 in Fig. 1 of Rodgers et al., we note that monitor 124 simply detects or identifies objects (col. 7, line 58). It does not make measurements as called for in the present claims because Rodgers et al. seek to avoid, rather than utilize, changes in frequency.


We therefore submit that all claims are in condition for allowance. Please charge any fee occasioned by this paper to our Deposit Account No. 20-0531. A new power of attorney is enclosed in connection with the present application.

Respectfully submitted,

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Reg. No. 33,497

Tel. No.: (617) 310-8108  
Fax No.: (617) 248-7100

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Steven J. Frank  
Attorney for Applicant(s)  
Testa, Hurwitz, & Thibault, LLP  
High Street Tower  
125 High Street  
Boston, Massachusetts 02110